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11/07

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.								
10/533,284	04/21/2006	Bela Jancsik	OPUL-1001US	4108								
<div>7590 11/26/2007 Knoble Yoshida &amp; Dunleavy Eight Penn Center Suite 1350 1628 John F Kennedy Boulevard Philadelphia, PA 19103</div>			<div>EXAMINER FAYYAZ, NASHMIYA SAQIB</div> <table border="1"><thead><tr><th>ART UNIT</th><th>PAPER NUMBER</th></tr></thead><tbody><tr><td>2856</td><td></td></tr></tbody></table> <table border="1"><thead><tr><th>MAIL DATE</th><th>DELIVERY MODE</th></tr></thead><tbody><tr><td>11/26/2007</td><td>PAPER</td></tr></tbody></table>		ART UNIT	PAPER NUMBER	2856		MAIL DATE	DELIVERY MODE	11/26/2007	PAPER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/533,284	JANCSIK ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Nashmiya S. Fayyaz	2856	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/28/05</u> .   | 6) <input type="checkbox"/> Other: ____.                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-10, 20 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by McFarland et al.- US Patent # 6,182,499. As to claim 1, McFarland et al disclose a system and method for characterization of materials with mechanical oscillators including plural sample chambers (arrayed wells 801/cells 901), controller (thermistor 807/909) for controlling the temperature of the wells/cells, a plurality of acoustic detectors (quartz resonators 805/903), driving device and data device (data acquisition and controller board 907 with computer 915 and processor 913), see figs. 8 and 9 and col. 12, lines 64 et seq. As to claim 2, the thermistors control the temperature. As to claim 3, note that data device includes processor 913 for data storage and processing. As to claim 4, note the global thermostat control signal coming from the controller board 907 which is in communication with programmable computer 915 in fig. 9. As to claim 5, note multiplexers (mux) in multiplexer control circuit of fig. 9. As to claim

6, the driving device is an oscillator, note fig. 5 description with frequency sweep system. As to claims 7 and 9, note the multiplexed control circuit of fig. 9 includes a computer 915 with processor 913 which is programmable. As to claim 8, note that the computer 915 which processor 913 could be designated the data validator as they are capable of such. As to claims 10 and 20, McFarland et al disclose a method for characterization of materials with mechanical oscillators including providing plural sample chambers (arrayed wells 801/cells 901), providing a plurality of acoustic detectors (quartz resonators 805/903), driving the detectors with data acquisition and controller board 907 with computer 915 and processor 913 at a resonant frequency and measuring a output of the resonators, see figs. 8 and 9 and col. 12, lines 64 et seq. As to claim 21, note the multiplexed control circuit of fig. 9 for oscillating the resonators.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 11-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over McFarland et al-US Patent # 6,182,499. As to claim 11, McFarland et al lack a teaching for provision of 96 wells. However, McFarland et al indicate that "a large array of cells" can be included in the circuit of fig. 9. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have included any number of reasonable wells such as 96 wells since McFarland et al teach inclusion of a large number of wells and since sample trays of 96 wells are old and well-known. As to claim 12, note in fig. 9 that board 907 is coupled to computer 915 and processor 913 for programming exchange and control. As to claim 13, note thermistors 909 are recited as controlled via board 907 and GT control signal. As to claim 14, note the "predefined temperature" indicated in col. 13, lines 19-30 indicating a temperature control. As to claim 15, note lines 45-50 of col. 13. As to claims 16 and 17, note the resonant frequency response over time is measured, note abstract. As to claim 18, note the properties measured as in the Abstract. As to claim 19, note col. 13, lines 31-50.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nashmiya S. Fayyaz whose telephone

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number is 571-272-2192. The examiner can normally be reached on Mondays and Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron E. Williams can be reached on 571-272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
HEZRON WILLIAMS  
SUPERVISORY PATENT EXAMINER  
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NFayyaz  
Examiner  
Art Unit 2856

nf  
11/20/07